

I found very little insect life on the flats, where the chief living things, apart from the cattle, were countless frogs with green stripes down their backs. No *Tetrix* or *Paracinema* to my surprise. In a moist corner, where there were some shrubs and long grass, was *Tetrix depressa*, *Conocephalus fuscus*, *Aiolopus strepens*, *Omocestus ventralis*, *Pezotettix giornae*, *Oecanthus pellucens*. The place seemed rich in tree frogs and big spiders.

Then to Bitolj and on to Skoplje, where I took a farewell walk up to a village called Vodno. On the path were the two common *Oedipodas*, *A. strepens*, and the usual Stenobothrids; *Acrida turita* low down, of which I had seen little in these parts, and *Tetrix depressa*. In the village I found a bed of nettles, somewhat unusual here, where by sweeping I got the only earwig I have seen in Serbian Macedonia. It was a female, so I cannot say if it were *Forficula auricularia* or *F. lurida*.

By that time the end of September was approaching. I went by the night train to Belgrad, still wearing whites. The next day winter set in.

From the point of view of Orthoptera, my six or seven weeks in Southern Serbia were disappointing. I was evidently too late in the season. I did not find anything like the wealth of species I had known in Greek Macedonia, on the other side of the gorge of Demir Kapu, which seems to mark a zoological boundary. Still, I can fairly hope that the few things I managed to take on the Shar may redeem the excursion.

NOTES ON NOMENCLATURE. I.

[A statement, not an argument, of the general position of the instability of our specific names and a summary of the factors which appear to have been the partially unavoidable causes of the position.]

In 1758 Linné followed up what he had already done in the Nomenclature of Botany, 1753, and applied his Binomial method of Naming to the Animal Kingdom in his famous *Systema Naturae*.

The older authors, although they readily adopted the Binomial System of Nomenclature from Linné, gave references to names, descriptions and figures of authors previous to 1767, the priority date first adopted, but did not further adopt the name of any species, or if they did they sponsored it as their own, just as did the authors immediately succeeding Linné and before 1767.

The only remarks on the specific names for many succeeding years may be summed up in the fact that workers in one country did not get to know what was going on in another and we find the same species getting a fresh name from ignorance of its recognition and name in some other country. Hence some species have obtained a string of names. Also we get a sexually dimorphic form treated as a separate species and named so. Even Linné treated *janira* and *jurtina* as two species, and the curious fact arose that although *jurtina* was the prior described and named, it was a female and hence the correct name of the species was taken to be *janira*, that of the male form, and so it remained until comparatively recently, when strict priority was adopted by the 1901 Commission.

In 1871 the 2nd edition of the famous Staudinger's List of European Lepidoptera was issued and the authors made no general change in the customary starting point for synonymy, the XIIed. of the *Systema Naturae* of Linné, which was published in 1767. The only references used of that date, besides Linné, were those of Hufnagel in the *Berlin. Magazin*, under the date presumed to be 1767, unless they clashed with a name in Linné's *Sys. Nat.*, when the latter was taken. This initial error in the reference to Hufnagel, strange to say, was not discovered until 1921. Of course, Stdgr. included many names and references like *machaon*, *rhamni*, *apollo*, *rapae*, *napi*, etc., etc., etc., not because they were in the Xed. but because they were in the XIIed. and were in general use.

In course of time, more particularly towards the end of the nineteenth century, with a deeper knowledge of the literature, it became evident that there were several important systematic works, between 1758, the date of the Xed. of the *S.N.*, and 1767, the date of the XIIed., in which the binomial nomenclature was used, and entomologists began to urge that the priority date should be that of the Tenth Edition of the *Systema Naturae*, viz., 1758, and to use works published between 1758 and 1767; some quoted names introduced in the pre 1767 period, e.g., Wocke in part II (micros) of Stdgr. 1871 List.

Kirby in his *Synonymic Catalogue of Diurnal Lepidoptera* of 1871 adopted the usual custom of recognising only as far back as the XIIed. of the *Sys. Nat.*, 1767, but in his "Supplement" of 1878 said, "I now consider the Xed. of Linné's *Sys. Nat.* and not the XIIed., as the only tenable starting-point," an opinion strongly renewed in his *Handbook of the Order Lepidoptera*, Vol. iii, 1896, where he expressed the absolute necessity of strict priority in specific names in a discussion of the name of *edusa* for our "clouded yellow," which he regrets that he must replace by the prior name *croceus*, Frery. Kirby was one of the first to give strong expression to the necessity of Priority in Nomenclature, which attitude, no doubt, was brought more closely to his notice by the *Catalog* of Staudinger, and he lost no opportunity in supporting his opinion and action. The late Lord Walsingham and his energetic secretary, John Hartley Durrant, also did a great deal to push forward these nomenclatorial matters in the beginning of the present century.

It was about this time that attention was gradually again being turned to the Genera of Lepidoptera. Genera stand on a different basis to that of species and their content must vary from time to time as we gain a greater detailed knowledge of the life-history and genetic relationship of the various species, coupled with the insertion of new species. Each genus must have a selected representative "type" species, around which related species are grouped, but subject to removal if compared with species of another genus and found incompatible with the first genus. The genus and its name may even disappear from use.

One of the most important publications on genera at this period was Scudder's *Historical Sketch* in 1875, which had been preceded by a limited preliminary *Systematic Revision of North American Butterflies*, 1872.

Perhaps we may be allowed to quote from a passage on Priority from the *Historical Sketch*. Scudder said, on p. 95 *et seq.*, "Butterflies

have suffered from the writings of uneducated naturalists," "more perhaps than any other class of animals." He went on to speak of the "tedious and painful" work of reducing the "mass of chaotic facts to order," and "The result reached in some cases will surprise many entomologists, as it has myself, and in not a few instances I would gladly see a logical way out of the necessity of change among names which have had long usage; but the law of priority is and would best be inexorable, and the action of those who decry it would relegate our nomenclature to an increasingly chaotic condition. I therefore hold to it as of the utmost importance in nomenclature, as the very foundation of its stability. The changes now required by its strict application are solely due to the neglect of the past."

May we point out to our readers that this neglect has gone on and on for more than half-a-century since the above was written, and when change is attempted the neglect is worse still, for the supplanted name has seldom been indicated with the prior name to give the reader a chance of understanding about what he is reading, and he is choked off by a naked unknown, which many probably have no means of finding, among their usually scanty literature, nor have the time and opportunity to work out. To quote an instance, I had a MS. submitted to me with the specific name *gnoma*, without any indication as to what species was meant. I had never met with it before; it was given as a main specific name. It occurred in no British List, nor in the various books used by the amateur such as South, Newman, Stainton. Was it a wanderer from abroad? No. At last I consulted Staudinger's *Catalog* (1901) and Seitz, both works not likely to be in the hands of many of our readers. In both I found under *dictaeoides*, "? *gnoma*, Fb." It is brutal to shirk the duty of editor in such cases. A name is used to help the reader to understand what is under discussion, to help him, and not to bewilder him and to spoil all interest in the subject he may have selected as a pleasant hobby for his hours of ease.

The amateur entomologists of this country have been always very conservative in their opposition to even necessary changes. No doubt this attitude was partly due to the dictatorial method of introducing new (i.e. old) names without reference to the name hitherto in general use.

In 1901 the 3rd edition of the *Catalog* of Staudinger was published and we find that the priority basis was in most species altered to the 10th edition of the *Systema Naturae* of Linne (1758) and that for the most part the names that were used in the 1871 *Catalog* were now, if necessary, adjusted.

It was not until 1901 that definite steps were taken to get the general adoption of strict Priority in Specific Names, when a Commission of naturalists was held, and it was adopted unanimously that this principle should come into general use. Hitherto the priority rule had been individual and sporadic in its application.

There arose considerable opposition to this principle and a "limited" Priority was advocated, that when a name had been in use for a long period, say 100 years, it should stand, but it has found small support, and the result would probably in many cases be worse than the adoption of absolute priority.

The more important works between 1758 (Linné) and 1767 (Linné) were (1) Linné, *Systema Naturae*, 1758; (2) Clerck, *Icones*, 1759-; (3) Linné, *Fauna Suecica*, 1761; (4) Poda, *Insecta Musci Graecensis*, 1761; (5) Scopoli, *Entomologia carniolica*, 1763; (6) Müll., *Fn. Ins. Fridrich.*, 1764; and (7) Hufn., *Berlinisches Magazin*, vol. ii, vol. iii, vol. iv. The dates of these volumes were, in error, taken as 1766, 1767, 1768 respectively, and not until 1921 was this error, so simple but so fruitful for error, discovered; and the dates corrected 1766 to 1765, 1767 to 1766 (Noctuae), 1768 to 1767.

This meant that where Linné described an insect in the XIIed. of the *Sys. Nat.*, 1767, and the same insect was described by Hufnagel reputedly in 1767, the former had been in use for 150 years, but the latter description was the prior with the corrected date 1766, e.g. *satellitita*, (Linné) (1767) = *transversa*, Hufn. (1766), an actual case in point.

As one instance of the effect of the adoption of the Xed. of the *Sys. Nat.* of Linné, 1758, in place of the XIIed. of 1767 was the spelling of the name of our "Kentish Glory" Moth, which had been in Linné, *Fn. S.* (1761) *versicolor*, but which should have been *versicolora* as originally in the 1758 work. I think Staudinger, in his *Catalog*, 1901, was the first to list the name with "a" when he adopted the Priority of 1758. J. W. Tutt followed in his *Brit. Lepidoptera*.

The influence of Seitz' works doubtless has been the greatest impetus in effecting the adoption of prior names and prior spelling. Every centre of Lepidopterological work in all countries is compelled by necessity to consult this encyclopaedia with its wonderful fitment of coloured plates. All the various authors of the sections have done their utmost to carry out the principle of Priority of specific names so that an exceedingly strong basis is afforded for further progress to follow.

The dates of publication of many works were very approximate for many years and in fact even now are a matter of indecision. Esper, Hübner, Herrich-Schaeffer are perhaps the worst. Only within the last few years, since the Royal Entomological Society obtained a mass of Hübner material, hitherto unknown to exist, from a private source, have the dates of his various publications been ascertained with all probable certainty. With the same material the dates of Herrich-Schaeffer were settled with the same certainty. With the works of Esper each volume began with the title-page and it has been customary to date each volume from that date, whereas after the first part the date does not apply to any other portion. For instance, vol. iv, in which the Noctuae are described, is dated 1786, but it is known from contemporary literature and from internal evidence in the text, that much of the matter and some plates did not appear until years later, and dates now can only be approximate.

As an example of the effect of the uncertainty of the dates take an example quoted from Hampson in his *Lepidoptera Phalaenae* in dealing with the Noctuid, *Scopelosoma satellitia*, vol. vi, p. 437 (1906). He gave the reference to the name *transversa*, Hufn., for this species, *Berl. Mag.*, iii, 418, but he dated it (1769). Why he did not quote the then accepted date (1767) we do not know.*

Reference has been made to the error in the recognition of the dates of publication of the volumes of the *Berlin. Magazin* of Natural History, to which Hufnagel contributed articles on the Lepidoptera of the neigh-

bourhood of Berlin. This magazine was issued in six parts per year. Each part was enclosed in an illustrated cover which was dated. The six parts were subsequently bound with another but quite different title page, with a different illustration and the *date of the year following that of the six parts*. For instance, the parts of vol. iii (which contain notes on the Noctuae) were published in 1766, but when bound up had the new title page dated 1767, those of each part, no doubt, having been discarded. The work is very rare, only a few copies existing, chiefly in museums. This fact of date was only discovered in 1921; the facsimiles of the covers were given with the above particulars in Oberthür's *Lepidoptera comparée* by Houlbert.

Thus it is imperative, if further progress is to be carried on at any reasonable rate, such changes as are necessary should be made, not in a dictatorial way but in an educative way. And, in addition, no further books of the pre-19th century beyond those already in use in synonymy should be brought into nomenclatorial matters to effect as far as is humanly possible what all are crying for, stability in our names.—HY. J. T.

*In fact, he made blunder after blunder in respect to this species. In his description of the typical form he stated "reniform represented by a white lunulate or elliptical spot," "with white points beyond its upper and lower extremities." Lower on the page he gave "ab. *satellitica*. Forewing with the spots at end of cell yellow." Then his reference to the ab. *albipuncta*, Strand, form (1903) was antedated by the ab. *trabanta*, Huene (1901), which reference in the *Stett. e. Ztg.* (1901) he overlooked.

COLLECTING NOTES.

ORTHOLITHA UMBRIFERA, PROUT, IN GLOUCESTERSHIRE AND SOMERSET.
—I have been carefully examining a series of insects in my cabinet purporting to be *Ortholitha mucronata* and have come to the conclusion that sixteen of them are undoubtedly examples of *O. umbrifera*, Prout. These were obtained in the counties of Gloucestershire and Somerset. I was interested to find that I had not a single example of *O. mucronata* amongst the specimens I had collected some 30 years ago in the Wye Valley, so imagine that this is an instance of an isolated colony of *O. umbrifera* alone. The Somerset specimens were obtained about 25 years ago on moorland in the Minehead-Dunster district, where they were to be found in the same locality as *O. mucronata*. The earliest and latest times of capture, as shown on my labels, are as follows: *O. umbrifera*.—Gloucestershire, 13th May-5th June; Somerset, 24th May-10th June. *O. mucronata*.—Somerset, 16th June-15th July. Also odd specimens of the latter from other districts: Sussex, 25th June; Hants, 15th July, and Bucks, 4th July-19th July. From this it would appear that *umbrifera* is probably on the wing quite three to four weeks earlier than *mucronata*.—J. F. BIRD, Redclyffe, Walton Park, Clevedon, Som., 17th May 1941.

NOTES ON VARIATION FROM THE WORTHING MUSEUM COLLECTION (*continued from p. 56*).—*A. bellargus*.—In the English specimens there is little or no difference in size between the two broods. There are several